



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,997	09/29/2000	Ange Aznar	FR9-1999-0080 US1	2350
45503	7590	12/29/2004	EXAMINER	
DILLON & YUDELL LLP 8911 N. CAPITAL OF TEXAS HWY., SUITE 2110 AUSTIN, TX 78759			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/676,997

Applicant(s)

AZNAR ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because Figure 3 fails to show blades 310, 320 and 330; interface data communication lines 317, 321 and 324, receive and transmit sides 311 and 312; lines 315; tables 316 and 326; and cells 318 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Storr (US 6,633,543) in view of Shobatake (US 2003/0021279).

Regarding claims 1 and 9, Storr teaches a method of setting up a path through an ATM network (col. 3, lines 10-12), between an entry port (Fig. 1, trunk 141) and a remote observation point (network equipment 103); duplicating all cells of incoming traffic entering through said entry port (col. 6, lines 51-53); and transporting the duplicated cells along the path to the observation point (col. 3, lines 42-45).

Storr fails to teach marking the duplicated cells.

However, Shobatake teaches tagging the duplicated cells (page 16, paragraph 0189). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Storr, by including Shobatake's method of tagging cells, since both teachings relate to ATM communication systems and cell tagging will indicate a connection to which the cell belongs (page 16, paragraph 0189).

Regarding claim 6, Storr further teaches transmission of duplicate cells from the source, to each destination (col. 6, lines 51-53).

Art Unit: 2667

Regarding claim 7, Storr teaches duplicating cells transmitted over ATM switches. The process of duplicating the cells includes duplicating various types of cells. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to include cells such as unexpected cells, error cells, and nonconforming cells, which would enable an observation point to monitor all traffic entering the switches.

Regarding claim 8, the combined method of Storr and Shobatake teach transporting marked and duplicated cells in an ATM network. It is known in the art that cells are marked for the purpose of uniquely identifying the cells. Thus, enabling the receiving switch nodes to recognize these distinct cells.

Cell headers provide source and destination information of each switch node and upon cell arrival, the switch node port tests whether the cell was properly transmitted to its intended destination. Thus, it is known in the art that tests are performed to determine whether the port of each switching node is included in the path to the observation point.

Additionally, it is known in the art and obvious to one skilled in the art that the cell will continue to travel along its intended path when each switching node port properly receives the cell. Thus, allowing continued transmission to the intended destination.

Furthermore, it is known in the art and obvious to one skilled in the art that the cell will discard and record an error when the cell is sent to an incorrect switching node. Thus, tracking erroneous transmissions and securing the networking by preventing receipt of unintended data.

Art Unit: 2667

Regarding claim 10, Storr further teaches a cell switch fabric (Fig. 3, ATM switch fabric **302**) in each switching node (switch **300**); and adaptive blades (represented by lines between the switch fabric and switch ports) between the ports (switch ports **320** and **330**) and the switch fabric.

Regarding claim 11, Storr further teaches means within the cell switch fabric or within the adaptive blades for replicating cells (col. 6, lines 51-53).

4. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storr and Shobatake as applied to claim 1 above, and further in view of Palnati et al. (US 5,991,297).

Regarding claim 2, the combined method of Storr and Shobatake teach marking and duplicating cells in an ATM network.

Storr and Shobatake fail to teach reserving a bit within a cell.

However, Palnati teaches inserting a bit selection into the cell header for every multicast cell (col. 5, lines 62-65). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the method of Storr and Shobatake, by inserting a bit selection into the cell header, as taught by Palnati, for the purpose of distinguishing cells amongst duplicate cells.

Regarding claim 3, the combined method of Storr, Shobatake and Palnati teach reserving a bit within a cell header.

Storr, Shobatake and Palnati fail to explicitly disclose the cell header field as a generic flow control field.

However, it is known in the art and obvious to one skilled in the art that the generic flow control field is located within the header of a cell. Thus, Storr, Shobatake and Palnati method would be modified to utilize a bit in a cell's generic flow control field, in order to control the flow of ATM cells over the user-network interface (Storr, col. 4, lines 17-19).

Regarding claim 4, the combined method of Storr, Shobatake and Palnati teach reserving a bit within a cell header.

Storr, Shobatake and Palnati fail to explicitly disclose the cell header field as a most significant bit of a virtual channel identifier field.

However, it is known in the art and obvious to one skilled in the art that the virtual channel identifier field is located within the header of a cell and the most significant bit can be used. Thus, Storr, Shobatake and Palnati method would be modified to utilize a bit in a cell's virtual channel identifier field, so as to identify the channel for routing the ATM cell through a network (Storr, col. 4, lines 19-21).

Regarding claim 5, the combined method of Storr and Shobatake teach marking and duplicating cells in an ATM network.

Storr and Shobatake fail to teach marking the duplicated cells with any combination of bits.

However, Palnati teaches unique combination of bits within a header of the cells (col. 6, lines 34-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the method of Storr and Shobatake, to

Art Unit: 2667

include Palnati's teaching of unique bit combinations within a header, for the purpose of conforming to different implementations (col. 6, lines 40-41).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Lee et al. (US Patent 6,636,510) discloses multicast methodology and apparatus for backpressure-based switching fabric.

* Lyles (US Patent 5,305,311) discloses a copy network providing multicast capabilities in a broadband ISDN fast packet switch suitable for use in a local area network.

* Bigham et al. (US Patent 5,677,905) discloses an access subnetwork controller for video dial tone networks.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rlm


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 12/23/09